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# NEWSLETTER
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## HAWAIIAN USES OF HERBS - PAST AND PRESENT

Mary Kaikainahaole 1/

The early Hawaiians were a clean people. They would make their settlements near the mouths of rivers and streams or along the banks of these rivers and streams. They took daily baths, and knowing that they ate with their fingers, they washed their hands before meals. From these people came many different kinds of kahunas (priests). These kahunas were very clean, especially the Kahuna-Laau-Lapaau.

These men, the Kahuna-Laau-Lapaau (literally translated as: a person knowledgeable of medicine), who would be known today as general practitioners, had studied the herbs of ancient Hawaii and their application to the human body. The kahunas were designated from the time of their youth. From the time that an interest in medicine was observed in a young lad, he would be sent to the home of the Community Kahuna where he was observed until the kahuna felt it was time for the training to begin. From this moment on, the lad traveled with the kahuna studying the various herbs, testing them and learning the dosage of each herb for each kind of illness, which at that time were very few. The training period lasted for twenty years, then the young lad who was now a grown man became a full-fledged Kahuna-Lapaau. Now a Kahuna-Lapaau, he began the treatment of various diseases using many different kinds of Hawaiian herbs. In this paper the uses of three of these, awa, laukahi, and noni will be presented.

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1/ The author is a University of Hawaii student who prepared this report while enrolled in a course in "Ethnobotany", taught by Beatrice Krauss. The editor feels that it is particularly worthwhile to place on record the modern day uses of these plants by the Hawaiians.

SHOUT
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IT

First of all, of the 'awa, or kawa, whose botanical name is Piper methysticum, it was said by Kamakau that, "The gods brought 'awa from Hoanianiku", which is the mythical origin of 'awa. Otto Degener writes that "the awa was introduced by the Hawaiians in pre-historic times." Native tradition reports that 'awa was first planted in the Hawaiian Islands on Kauai by Oilikukaheana, who brought it from Tahiti as a fishing plant medicine. There are other source of the origin of the 'awa such as this chant:

He 'awa keia no'u no Awini,
He kanaka lawai'a au
No na pali hula'ana nei
O Laupahoehoe nui me Laupahoehoe iki.

Na Kane me Kanaloa i Kanu,
No'u akua o ka lewa lani, ka lewa nu'mu,
O ka 'awa popolo a Kane i kau iluna,
I ulu iluna, i lau iluna, i o'o iluna,
I ki'ina ia i Ka'iole moku ka 'alihi
Hehehei ilalo nei, ulu laha i ka honua
Aha'i ka manu kau iluna o ka la'au
Iho mai ka 'awa hiwa me ka makea
Elua laua.

O ka papa'ele me ka papakea,
Elua laua.

O ka mo'i me ka mokinana,
Elua laua.

O ka nene me kawaimakaakamanu
Elua laua.

Ho'awa ki 'awa e Kane i ka wai
Inu ka 'awa, pupu i ka i'a
No ko pulapula ho Hanoalele
Amama ua noa, lele wale ho'i.

This chant translated means:

Here is 'awa from me, Awini,
A fisherman am I
Of the inaccessible cliffs
Of greater Laupahoehoe and lesser Laupahoehoe,
A plant set out by Kane and Kanaloa,
My gods of the heavens above and the heavens below,
The 'awa popolo of Kane, that existed above,
Grew above, leaped above, ripened above.
It was seized by Makali'i and hung on high.
The rat ascended and chewed that rope that held it.
Down if fell, multiplied, and spread over the earth.
The birds carried some up into the trees,
The 'awa hiwa and the makea came down,
A pair were they.

The dark papa and the light papa,
A pair were they.

The mo'i and the mokihana,
A pair were they.

The nene and the Ka-wai-maka-a-ka-manu,
A pair were they.

The 'awa of Kane is mixed with water,
The 'awa is drunk, fish is eaten for aftertaste.
This is for your offspring, Hanoalele,
Amama, it is freed, it has flown.

This chant tells of one of the origins of the 'awa and also revels the names of some of the types of 'awa found in the Hawaiian Islands. E.S. Graghill Handy lists fourteen different kinds of 'awa. Some of the more importante are: the Apu-'awa is identified by its short green stalks; the Hiwa, by long joints and dark green stalks; Keokeo is whitish in appearance and is still commonly found; Kumakua, has internodes of medium length, and is a tall green bush; the Moi has internodes which are short and dark green, and the nodes are somewhat whitish (considered royal and superior, they were used by the aliis or chiefs); Mokihana which is the famous 'awa of Kauai, has short and stubby internodes called Ka. It also has stalks like a clump of bamboo standing in a sunny place with branches that are close together.

There is also the kaulau, which is the famous 'awa of Puna, Hawaii. According to some early Hawaiians, the Kaulau grows in the crotches of trees where it became plantes by birds pulling pieces of the stem into their nests. The following line is taken from a Hawaiian mele which coincides with the pulling of stem pieces by the birds.

Ka manu a hai kanu 'awa e,
translated as:
The birds clipping the twigs of the 'awa and planting it elsewhere.

Mrs. Pukui expressed her opinion about this Ouna 'awa as, "this Puna 'awa was famous for its strength because the roots grew in the sunlight."

The 'awa was used by all the classes of Hawaiian people except the "Kauwa" or the slaves. Before picking the 'awa or other herbs, prayers would be offered to the God Ku and the Goddess Hina. This was done when the herb was to be prepared by the Kahuna-Lapaau. When the herb was to be picked by the right hand, the prayer was offered to Hina, and when it was picked with the left hand, the prayer was offered to Ku. The alii or chiefs had their 'awa drink prepared by a faithful servant and drank it for pleasure, whereas the Kahunas used the 'awa as gift offerings and for other rituals. The commoners or the "Makaainana", used it for relaxation after a long day of strenuous labor with only simple ceremonies.

For example, Paahana Wiggin and Mrs. Pukui say, "In the old days, the root of the 'awa was chewed ("mama") by young girls or boys with stronghteeth. Before chewing, the mouth was rinsed out with wood ashes mixed with water. Then, enough

roots were left to make a small ball called "Manaawa" in the mouth and was chewed for a long time and was ttaken out with the fingers and put in a bowl "Kanoa". This was repeated until there was sufficient chewed fiber for the quantity desired. Water was added and bundles of ahuawa were dropped in and turned "Hoka" round and round clockwise while pressing down to catch up the fibers all around the inside of the bowl with the fingers of both hands, closed in, lifted up and squeezed. Then, the fibers were shaken out and the ahuawa was formed into a funnel shaped nest with a little depression in the center, and was held over the cup "apu" while the 'awa was poured "Kahee" through it into the cup. The drinker took his cup outside, dipped his righ index finger into the cup three or five times, each time pressing his hand over his right shoulder and flipping "Pana" the drops of 'awa up and backward. While doing this, a prayer was said to the family God "Aumakua," "here is food for the family God," continuing with requests for help, long life or whatever else the drinker had in mind. He then came back into his house, sat down and drank his 'awa, topping it off with "Pupu" to finish another ceremony with a sweet banana or sugar cane to take the bitter taste away. He then ate warm food and slept peacefully.

The 'awa was also used medicinally. It was a cherished narcotic. For example, this excerpt is taken from the legendary character, Ewa: "Let me first eat of this plant and should I die, do not plant it for it shall be valueless. If I do not die then we will be rich." After this quote, she ate the plant, she became drunk and was intoxicated all day. When she awoke, she called the plant 'awa.

'Awa is also used for moisturing of the tongue as stated by Dr. Emerson, "I have often, while tramping in the woods, moistened my tongue with small pieces of 'awa chipped from some root and experienced relief from thirst by its pleasant, cooling, aromatic numbing effect on the mucus membrane of the tongue."

Medicinally, the 'awa was used for and is still being used for congestion in the urinal tract, rheumatism, and asthma. 'Awa also helps in shoothing the nerves, relaxes fatigue and stiff muscles, and induces sleep. It is also used asaa treatment for excess fat. Diehl says, "'Awa is a spinal rather than a cerebral depressor. It steadies the pulse, it does not raise the temperature, and acts as a diuretic and stomachic tonic." Other uses are for general debility, especially in children, chills and hard colds, short blinding headaches, disorderly stomach and white-coating of the tongue in children, ling and kindred troubles, weaknesses rising during the time of virginity, displacement of the womb, and poultices for boils. It was also used in infections of the skin, veneral disease, kidney and leprosy. At one time a large quantity was sent to Germany and elsewhere for use as a drug.

'Awa can be useful to health but, it has its harmful effects if not used correctly. Too many 'awa leaves inserted into the vagina may induce a miscarriage. If 'awa as a drink is taken often in large quantities, it makes the skin scaly "Mahuna" or ulcerous. The eyes become blood shot and control of the arms and legs is reduced, walking is difficult or impossible. However, the mind remains clear until sleep comes, and emotions are unaffected.

In this passage from Kamakau, the use of 'awa in the treatment of excess fat is discussed. "People in the old days liked the means of 'awa in deducing weight. When a man saw himself growing too fat, and subject to illnesses, the best thing to do was to drink copiously like the gods and like those possessed of the spirit,

until the skin scaled, let him look for the potent 'awa and by a large quantity then begin to drink and eat nothing between meals. Fish and poi were to be eaten only when the cup of 'awa was drunk. One must not go out in the sun and rain lest the feet crack in the water and mud. This was because the skin became thin and dry. The first cup was enough to make one drunk for two days. The day after a man had become intoxicated from drinking 'awa he would be intoxicated again when he drank 'awa, when he bathed in sea water, or when he ate. This effect lasted two or three days. Then, if he took it again, his head would grow heavy feeling would go down to the chest, and when the cups of 'awa were continued, his skin would begin to scale and he would begin to lose weight. The scales would peel off and more 'awa would be taken as medicine combined with a cathartic to act as a double herb to clean out the body. Then after three of five cups of 'awa, the body becomes spare."

Another Hawaiian herb which was widely used was the Lau-kahi, Plantago major L. The origin of the Lau-kahi in Hawaii is unknown. It was found also in Europe, Asia, North America, and in the Pacific. Today, it is found along roadsides, or in vacant lots or in people's yards. The Lau-kahi, during my childhood days, had no meaning to me. It was picked and mixed with the Ihi plant and hibiscus buds as a play meal for us. But as the years passed, it became more meaningful to me for I was shown the different uses of this plant.

The Lau-kahi has medicinal uses. For example, it was used to give strength to the weak, especially children. The following presents the usage of the Lau-kahi for giving strength to children. A child ten days old: one leaf is baked in ti leaves and then chewed by the mother and fed to the child. A child from one to forty days: a leaf and a half is taken and prepared in the same manner. A child from fifty days to three months: two leaves are given with the same manner of preparation. A child three to six months: three leaves are given. A child seven months to one year old: four leaves are given. The effect of the remedy will also get to the child through the mother's milk.

The dried leaves were used for tea. When the green leaves were pounded, they were used as a poultice for boils. To use for boils: take two leaves and rub them together with salt until softened. These are then put over the boil covering the entire lump. A vein, wound around a core in the form of a ring, is put on and around the eye from which the pus might burst forth and this is covered with a piece of cloth to keep it in place. This application is repeated every morning until the eye bursts open and the core is removed.

The juice could also be used to stop the bleeding of an open wound. The juice of this plant was drunk and used as a remedy for diabetes and as a means of cleansing the stomach. I did not know of these uses until this experience happened:

A diabetic man, who was being treated by the doctor, had stepped on a tack. His leg became infected and was treated by his doctor. After being recommended by the doctor to be hospitalized, he refused. He refused because a man, who was knowledgeable in Hawaiian herbs, had visited the sick man and told him that he need not enter the hospital for he was able to help the infection with the Lau-kahi. The uses of Lau-kahi, as previously mentioned, were told to him. After three weeks of applying the herb to the infected foot, the foot became rotten, "palahu". The infected foot was later amputated. When he asked the doctor about the amputation, the doctor replied, "The herb that was used is not clean in our modern days. It

is not clean as in the days of the Kahunas. And, too, the applicator probably did not understand the use of this herb."

In talking with some old Hawaiians about the usage of the Lau-Kahi, I was told that the herb would have worked if the symptoms and the preparations were noted correctly. For example, with the amputated foot, the man should have seen that his diabetes was under control, if not by the help of the doctor, then through the drinking of the Lau-kahi juice. Too, the applicator of the herb should have pounded the leaves of the Lau-kahi and mixed it with Hawaiian salt then applied it to the injured area.

There were other medicinal uses of the Lau-kahi which were never revealed by the ancient Hawaiians and thus the uses died with them.

The third kind of Hawaiian herb to be discussed is the noni. The noni, whose botanical name is the Morinda citrifolia, is a member of the Rubiaceae, or the coffee family. It is widely distributed along the lowlands in the Pacific. In the Hawaiian Islands the noni is found chiefly near abandoned native dwellings; for example, in Kahaluu and Kaaawa, on the outskirts of forests, and in lowlands. The noni, used as a source of food, was purposely brought to these islands by the progenetors of the Hawaiian race during their great migration.

Fornander gave this chant of Kamapua'a to the goddess Pele:

Mai Puna ho'i au i hele mai nei,
Ua ike mai nei ho'i au i na wahine kohi noni,
Wauwau noni,
Pakuikui noni
Kakau noni
O Kapanaiki kanaka loa.

Translated:

It is from Puna that I have come.
And I have seen the women gathering noni,
Scratching noni,
Pounding noni,
Marking with noni,
Kapunaiki the long man.

Beside the usage as dye, the noni was eaten or drunk for medicinal purposes. It was also combined with other herbs to make medicinal tonics. For example, this recipe was used by people who had tuberculosis: the fruit of the noni, the native black stemmed sugar cane called "Koeleele", and the root of the 'awa were used. After pounding and straining each herb separately, the juices were mixed together; and if a blood-red clay called "Koae" was available, a little of it was added to this mixture. Hot stones were then placed into the calabash containing this mixture to bring it to a boil. After cooling, this tonic was then drunk by the person who had tuberculosis.

There were other medicinal uses for the noni. The flowers were picked and eaten raw to clean the digestive tract. The leaves were used for sweating when there was fever. Crushed leaves were used for boils, sores, and wounds. The bark

of the stem was used for cuts and the juice of the root for skin eruptions. The seeds of the noni were also used in treatment of cuts. The young fruit of the noni mixed with "Popolo" was used for womb trouble. The yound fruit mixed with salt was used for cracked bones. Green fruits were mashed and applied for concussions. The half ripe fruit, cut in half, was used as a poultice for boils. The juice of the ripe fruit was and still is used for diabetes.

The following two examples will show the usage of noni juice at the present time. During the late forties we would go down to Kahaluu and Kaaawa to pick noni for my mother. We would pick the ripe fruits and bring them home where they were washed and placed in a crock to ferment. After fermentation, the noni was strained and boiled. After cooling, the juice was then poured into gallon bottles and placed in the refrigerator. My mother would then take a small glassful before meals. This was used for her diabetes.

While conversing with a woman last week, I was told of her usage of the noni. Being a diabetic, she, too, had heard about the noni and decided to use it. When the fruit became fully ripe, she placed them into an osterizer. She then put the pulp of the noni into the refrigerator to cool. She would drink a glassful before meals and before going to bed. About a month ago while cleaning her yard, she accidentally stepped on a rusty pitchfork and one of the prongs entered her foot just below the ankle. It was very painful when she tried to remove it so she was taken to the emergency ward of Maluhia Hospital. The next day, she went to her doctor and upon examining her, he told her that she would have to be careful with her foot. To his surprise, he saw that her foot improved each day and that her diabetes was under control. He asked her about her condition and she replied that she was taking noni. Being satisfied with his patient's results, he did not question their usage of Hawaiian herbs.

The boiled noni juice is also taken for heart trouble and high blood pressure. The noni was closely associated with the god Ku and the goddess Hina. Upon picking any part to be used for medicine, this ceremony was followed: face the east and pluck with the right hand and offer a prayer to the god Ku. Then the left hand plucks and the same prayer is offered to the goddess Hina.

But in these modern times, in conversation with people one finds no mention of the gods and goddesses when picking the various Hawaiian herbs to be used as medicine. With the knowledge of various Hawaiian herbs that I have acquired, I believe that the doctor should also be consulted, more so in case of serious illnesses.

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HAWAIIAN BOTANICAL SOCIETY
Annual Report of the Secretary for 1968

During 1968 the Hawaiian Botanical Society voted to contribute the sum of $2,000 from the Marie C. Neal Memorial Account to the Nature Conservancy for the purchase of land in Kipahulu Valley, Maui. The Axis Deer Committee was reorganized to represent the Society on the issue of introducing Axis deer to the island of Hawaii. The By-Laws were revised to facilitate attainment of membership. Hawaiian Botanical Society awards at the Hawaiian Science Fair were presented to Loraine Watanabe and Beatrice Yamamura of Haiku School on Maui and Diane Oda and Cheryl Sakai of Waikea Intermediate School of Hawaii. Both awards were in the Intermediate Division. The Hawaiian Botanical Society Prize for the Senior Most Likely to Reflect Credit upon Botany was presented to Stephen A. Ferreira. About 40 persons participated in the Summer Foray led by Tom Mc Guire to Wiliwilinui Ridge Trail.

Dr. Richard Hartmann conducted the two plant donations held in April and November.

At the regular meetings during the year, the following talks were presented:

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| January 8 | "Use of fire in land management," by Dr. Richard J. Vogl, Visiting Professor, Department of Botany, University of Hawaii. |
| February 5 | "The vegetation of Kipahulu Valley," by Mr. Robert E. De Wreede, Department of Botany, University of Hawaii. |
| March 4 | "Orchids in Hawaii, past and present," by Mr. Oscar M. Kirsch, Professional Horticulturalist, Honolulu. |
| April 1 | "Plants in Costa Rica", by Mr. L. Earl Bishop, Department of Botany, University of Hawaii. |
| May 6 | "Fire and other tools in wild land management", by Mr. Robert E. Nelson, Director, Institute of Pacific Islands Forestry. |
| June 3 | "A symposium on the advisability of introducing Axis deer into the Island of Hawaii" by Mr. Ronald L. Walker, Division of Fish and Game, Department of Land and Natural Resources, State of Hawaii, and Dr. Charles H. Lamoureux, Department of Botany, University of Hawaii. |
| October 7 | "Exploring for cacti in the Caribbean", by Dr. Franklin W. Martin, United States Department of Agriculture, Mayaquez, Puerto Rico. |
| November 4 | "Our poisoned air", or, "It's an ill wind", by Dr. Sanford M. Siegel, Department of Botany, University of Hawaii. |
| December 2 | "Plant induced skin problems", by Daniel D. Palmer, MD, Department of Pharmacology, University of Hawaii and Retiring President. |

During 1968 the Society lost 70 members and gained 23 new members. As of December 1, 1968 the total membership of the Society was 230.

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THE HAWAIIAN BOTANICAL SOCIETY NEWSLETTER isspublished in February, April, June, October, and December. It is distributed to all Society members with the purpose of informing them about botanical news and progress in Hawaii and the Pacific. News contributions and articles are welcomed.

THE HAWAIIAN BOTANICAL SOCIETY was founded in 1924 to "advance the science of Botany in all its applications, encourage research in Botany in all its phases," and "promote the welfare of its members and to develop the spirit of good fellowship and cooperation among them." "Any person interested in the plant life of the Hawaiian Islands is eligible for membership in this Society."

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